

Safety data sheet according to EC Regulations No 1907/2006 (REACH) and No 453/2010

Printing date 21.08.2013

Revision: 21.08.2013

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** **MUSKIL KNOCKOUT PASTA FLUO-NP**
- **Sds code/version:** 0/13
- **Relevant identified uses of the substance or mixture and uses advised against**
READY FOR USE RODENTICIDE PASTA BAIT (BIOCIDE-PT14) FOR TREATMENTS OF RATS AND MICE IN AND AROUND BUILDINGS
- **Application of the substance / the preparation** Rodenticide
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Zapi S.p.A.
Via Terza Strada, 12
35026 Conselve (Pd)
Italy
Tel. +39 049 9597737 Fax +39 049 9597735
customer.service@zapi.it - www.zapi.it
E-mail address of the competent person responsible for the SDS: techdept@zapi.it
- Marketed by: Barrettine Environmental Health (J. V. Barrett & Co Ltd). St Ivel Way, Warmley. Bristol. UK. BS30 8TY.
www.barrettine.co.uk Tel: +44 (0) 1179 672222 Email: beh@barrettine.co.uk
- **Further information obtainable from:** Tech. dept.
- **Emergency telephone number:**
Zapi customer service: tel. +39 049 9597737 (9:00-12:00/14:00-17:00)
NHS Tel. 0845 4647 Barrettine Environmental Health Tel: +44 (0) 1179 672222

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
The product is not classified according to Directive 1999/45/EC
- **Information concerning particular hazards for human and environment:**
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- **Label elements**
- **Labelling according to EU guidelines:**
Observe the general safety regulations when handling chemicals.
The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).
- **Safety phrases:**
1/2 Keep locked up and out of the reach of children.
13 Keep away from food, drink and animal feedingstuffs.
20/21 When using do not eat, drink or smoke.
37 Wear suitable gloves.
46 If swallowed, seek medical advice immediately and show this container or label.
- **Special labelling of certain preparations:**
To avoid risks to man and the environment, comply with the instructions for use.
- **Additional information:**
AUTHORISATION N° UK-2013-0756 - Authorisation holder ZAPI S.p.A. Via Terza Strada, 12 35026 Conselve (PD)
Italy
Product type: 14-Rodenticide For professional and non-professional use.
- **Information concerning particular hazards for human and environment:**
Prevent access to bait by children, birds and non-target animals (particularly dogs, cats, pigs and poultry). Baits must be securely deposited in a way so as to minimize the risk of consumption by other animals or children. Where possible, secure baits so that they cannot be dragged away. Unless under the supervision of a pest control operator or other competent person, do not use anticoagulant rodenticides as permanent baits. In most cases, anticoagulant bait should have achieved control within 35 days. Should activity continue beyond this time, the likely cause should be determined. Search for and remove dead rodents at frequent intervals during treatment, at least as often as when baits are checked and/or replenished. Daily inspection may be required in some circumstances. When the product is being used in public areas, the areas treated must be marked during the treatment period and a notice explaining the risk of primary or

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secondary poisoning by the anticoagulant as well as indicating the first measures to be taken in case of poisoning must be made available alongside the baits. When tamper resistant bait stations are used, they should be clearly marked to show that they contain rodenticides and that they should not be disturbed. The resistance status of the target population should be taken into account when considering the choice of rodenticide to be used. In those areas where evidences of resistance to specific active ingredients are suspected, avoid their use. To minimise the accumulation of rodent resistance to anticoagulants, it is advisable to alternate baits containing different anticoagulant active ingredients. Never place the product indiscriminately.

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- Dangerous components:		
CAS: 56073-07-5 EINECS: 259-978-4	difenacoum T+ R28; T R48/25; N R50/53 Acute Tox. 2, H300; STOT RE 1, H372; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.0025%
CAS: 28772-56-7 EINECS: 249-205-9	bromadiolone T+ R26/27/28; T R48/23/24/25; N R50/53 Acute Tox. 1, H300; Acute Tox. 1, H310; Acute Tox. 1, H330; STOT RE 1, H372; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.0025%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:**
Seek immediate medical advice.
Show the container, label or the safety data sheet of the product.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
Difenacoum and bromadiolone are anticoagulants which may produce bleeding; the onset of bleeding may be delayed for several days after exposure. If there is no active bleeding the INR (prothrombin time) should be measured on presentation and 48-72 hours after exposure. If the INR is greater than 4, administer Vitamin K1 (phytomenadione) 5-10 mg by slow intravenous injection (100 µg/kg body weight for a child). Treatment with phytomenadione (orally or intravenously) may be required for several weeks. The advice of the National Poisons Information Service (<http://www.npis.org/>) should be sought, particularly if active bleeding occurs.
- **Indication of any immediate medical attention and special treatment needed**
Vitamin K1 (under medical supervision). UK medical professionals should contact the National Poisons Information Service (www.npis.org) for further advice.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** No special measures required.

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- Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

- Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage**- Handling:****- Precautions for safe handling** Wear suitable gloves.**- Information about fire - and explosion protection:** No special measures required.**- Conditions for safe storage, including any incompatibilities****- Storage:****- Requirements to be met by storerooms and receptacles:** No special requirements.**- Information about storage in one common storage facility:** Not required.**- Further information about storage conditions:**

Keep in a cool, dry, well ventialed area

Store under lock and key and out of the reach of children.

- Specific end use(s) No further relevant information available.**8 Exposure controls/personal protection****- Additional information about design of technical facilities:** No further data; see item 7.**- Control parameters****- Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- Additional information: The lists valid during the making were used as basis.**- Exposure controls****- Personal protective equipment:****- General protective and hygienic measures:** Keep away from food, drink and animal feedingstuffs.**- Respiratory protection:** Not required.**- Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- Eye protection: Not required.**9 Physical and chemical properties****- Information on basic physical and chemical properties****- General Information****- Appearance:**

Form:	Solid
Colour:	Fluorescent red

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- Odour:	Characteristic
- Odour threshold:	Not determined.
- pH-value:	6.90 (1% aqu. sol. CIPAC MT75.3)
- Change in condition	
Melting point/Melting range:	Not applicable
Boiling point/Boiling range:	Not applicable.
- Flash point:	Not flammable
- Flammability (solid, gaseous):	Not determined.
- Ignition temperature:	
Decomposition temperature:	Not determined.
- Self-igniting:	Product is not selfigniting.
- Danger of explosion:	Product does not present an explosion hazard.
- Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
- Vapour pressure:	Not applicable.
- Density:	1.282 g/ml (CIPAC MT33)
- Solubility in / Miscibility with water:	Insoluble.
- Partition coefficient (n-octanol/water):	Not determined.
- Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
- Solvent content:	
Organic solvents:	0.3 %
- Other information	No further relevant information available.

10 Stability and reactivity

- Reactivity
- Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:

- LD/LC50 values relevant for classification:		
28772-56-7 bromadiolone		
Oral	LD50	1.125 mg/kg (rat)
Dermal	LD50	1.71 mg/kg (rabbit)
Inhalative	LC50/4h	0.00043 mg/l (rat)
56073-07-5 difenacoum		
Oral	LD50	1.8 mg/kg (rat) male rat 2 mg/kg (rabbit)

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Dermal	LD50	1000 mg/kg (rabbit)
MUSKIL PASTA BAIT		
Oral	LD50	> 2500 mg/kg (rat) (OECD 423)
Dermal	LD50	> 2000 mg/kg (rat) (OECD 402)

- Primary irritant effect:**- on the skin:**

Non-irritant
(OECD 404-rabbit)

- on the eye:

Non-irritant
(OECD 405-rabbit)

- Sensitization:

Non-sensitiser
(OECD 429-mouse)

- Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12 Ecological information

- Toxicity**- Aquatic toxicity:****28772-56-7 bromadiolone**

LC50/96h	3.0 mg/l (bluegill sunfish)
	1.4 mg/l (rainbow trout)

56073-07-5 difenacoum

LC50/96h	0.10 mg/l (rainbow trout)
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- Persistence and degradability No further relevant information available.

- Behaviour in environmental systems:

- Bioaccumulative potential No further relevant information available.

- Mobility in soil No further relevant information available.

- Ecotoxicological effects:**- Other information:****28772-56-7 bromadiolone**

Oral	LD50	138 mg/kg (bobwhite quail)
	LC50	>1000 mg/kg (worm)

56073-07-5 difenacoum

Oral	LD50	>50 mg/kg (chicken)
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- Additional ecological information:

- General notes: Do not allow product to reach ground water, water course or sewage system.

- Results of PBT and vPvB assessment

- PBT: Not applicable.

- vPvB: Not applicable.

- Other adverse effects No further relevant information available.

13 Disposal considerations

- Waste treatment methods**- Recommendation**

Dispose of dead rodents in accordance with local requirements. In the UK poisoned rodents may be disposed of by the waste producer at an incinerator or landfill permitted to accept that type of waste, or collected by a registered waste carrier and taken for disposal at a suitably permitted site. For professional use: for further information on disposal contact the Environment Agency (<http://www.environmentagency.gov.uk>) or SEPA (<http://www.sepa.org.uk>).

Product and its packaging: remove all baits after treatment and dispose of them in accordance with local requirements.

For information on disposal in the UK contact the Environment Agency (<http://www.environment-agency.gov.uk>) or SEPA (<http://www.sepa.org.uk>).

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For non-professional use: In the UK waste bait should be double bagged in plastic bags and disposed of in a household waste bin with a secure lid to prevent access of wildlife or pets or taken to a civic amenity site. For information on civic amenity sites contact the local authority.

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- UN-Number	
- ADR, ADN, IMDG, IATA	Not applicable
- UN proper shipping name	
- ADR, ADN, IMDG, IATA	Not applicable
- Transport hazard class(es)	
- ADR, ADN, IMDG, IATA	
- Class	Not applicable
- Packing group	
- ADR, IMDG, IATA	Not applicable
- Environmental hazards:	
- Marine pollutant:	No
- Special precautions for user	Not applicable.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Chemical safety assessment** For an appropriate use of the product, follow the indications mentioned in the label.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases

- H300 Fatal if swallowed.
- H310 Fatal in contact with skin.
- H330 Fatal if inhaled.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- R26/27/28 Very toxic by inhalation, in contact with skin and if swallowed.
- R28 Very toxic if swallowed.
- R48/23/24/25 Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
- R48/25 Toxic: danger of serious damage to health by prolonged exposure if swallowed.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- Sources

1. 1999/45/EC Directive, 2006/8/EC Directive and following amendments
2. 67/548/EEC Directive and following amendments
3. 91/155/EEC Directive and following amendments
4. The Merck Index Ed. 10
5. The E-Pesticide Manual 2.1 Version (2001)
6. Regulation (EC) No. 1907/2006 and following amendments